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58th ANNUAL FINANCIAL SURVEY of the RIGID PAPER BOX INDUSTRY

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Issued for The Use of Members of
NATIONAL PAPERBOX & PACKAGING ASSOCIATION, INCORPORATED
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58th ANNUAL FINANCIAL SURVEY

OF THE

RIGID PAPER BOX INDUSTRY
Covering the year 1982

*** THE 1982 SURVEY ***

It has been your Association's belief that these Financial Surveys and projections of the R.P.B. Industry performance statistics are valuable to the executives who are seeking an externally oriented benchmark of their company's performance. This 58th Survey provides an extensive appraisal of the past year's economic and industry performance indicators. By comparing your company's performance (as detailed in the computer-prepared personalized Company Supplement) with that of the total Industry, or with a specific geographic area or sales size, you can better determine your company's goals and alternative improvement actions needed to reach those goals.

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I. Managing Your Firm's Effectiveness Efforts: A Quality Management Approach.

During the first two years of the 1980s, management pressures for lower-cost, higher-quality production swept through American manufacturing businesses. Although the mix and intensity of the profit squeeze varied, the same underlying factors threatened profits across industries. Materials and energy costs shot up. Foreign competitors showed higher productivity gains, and undercut domestic prices with quality products. High interest rates increased the cost to modernize capital equipment. And real growth slowed.

Managers and staff professionals responded to the profit squeeze by focusing upon the production function, and exploring every area within it for productivity and quality improvements. Today's human resource management principles contain the employee involvement tools to restore a business to a cost competitive position. The challenge lies in indentifying ways to accomplish the gains needed in their organizations in order to be a low-cost producer of quality products.

The management of QUALITY holds out great promise for enabling a company to become more effective in the long run. The concept of quality can become the driving force which stimulates managers, shop employees and office workers to get involved in the productivity/ quality challenge and to identify improvement suggestions and act

upon them. Quality management can be used as the principal focus for a firm's effectiveness efforts. The first fundamental is to develop meaningful definitions of quality and relate them to productivity. The second fundamental calls for managers to solicit assistance from all employees within the company to facilitate quality and productivity improvement efforts.

Quality Defined

> "Quality is the pursuit of excellence, in the eyes of our customers, employees, vendors and community."

While this definition is concise, it does not serve as a basis for building an improvement effort in your organization. We must define the concept of quality in more tangible terms and distinguish between production quality and product quality.

Production quality is the level of production efficiency required by the firm's conversion process in order to meet the specifications of the products being sold. Quality improvement efforts in the factory are aimed at detecting errors, correcting their causes and thereby eliminating waste, delays and poor workmanship in the product.

Product quality is the level of relevance, uniformity and dependability which is satisfactory to the customer. Sales personnel aim their product quality efforts at providing enhancements to design specifications in order to increase their firm's competitive position in the market place.

With these two related definitions of quality we can see that the concept of quality is extended to defining and meeting the customer's requirements and doing so with no wasted labor, materials or capital resources.

The Productivity/Quality Connection

In many U.S. firms, quality and productivity are viewed as distinctly different issues. With the above definitions of production quality and product quality, managers and employees can understand the linkage between quality and productivity. Productivity is the ratio between output quantity produced and labor, material energy and capital inputs consumed in the production process. Quality concerns, as set-forth in the above definitions, also encompass both the outputs and the inputs of the process.

When production quality declines, the results include increased rework and scrap, expedited orders, wasted manpower, poor machine utilization, and higher work-in-process inventories waiting for rework activity. These results are equivalent to an automatic decrease in productivity.

When product quality declines, customer disruptions appear in the form of returns and rejects, expediting costs and disrupted schedules. Such results substantially diminish the company's image as a high-quality producer and they usually lead to counter-productive activities within the manufacturing operation.

In short, quality and productivity are almost synonymous. Managers must recognize that a firm that improves quality of its output will be improving its productivity. Without a doubt, both productivity and quality improvement efforts should be driven by the same management attitudes and standards: producing a product that meets customer specifications, with minimum waste and delay.

With those two tangible definitions of quality, a company's management can focus its staff and plant employees on the relative excellence of the components of quality. Sales and design personnel should be tasked to measure how their product's quality ranks against the competitor's product and why there are perceptible differences. Accordingly, as a basic input to future product offerings, customer-based measurements of product quality should be pursued. Such measurements should normally entail:

1. What product attributes do the customers deem most important to satisfaction with a product?

2. How do your company's products compare overall and on an attribute-by-attribute basis?

Several methods are typically followed in gathering this information. Formal customer surveys, in-depth customer interviews, as well as regular business contacts by sales and management personnel can all generate customer-based product quality measurements on a routine basis.

Operations personnel should be tasked to appraise production quality on a formal basis. Rework, scrap, inspection errors, purchase order changes, supplier rejects, costs of inspectors and others concerned with preventing and appraising production quality explicitly affect the resource inputs to the productivity ratio. Relating productivity and production quality emphasizes the importance of doing things right the first time.

Quality Management: An Employee Involvement Effectiveness Effort

Tangible definitions of quality will go a long way toward helping all members of the organization understand how their work relates to improving the firm's competitiveness. Top managers have the responsibility for establishing these definitions and designing a quality management effort within the context of the total company strategy.

To improve quality and productivity, managers and employees at all levels need a proper frame of mind. Experience has taught us that improvement awareness comes only with resource commitments to education and communication programs. Various approaches help to create a quality and productivity consciousness in every day-to-day activity: employee participation in problem-solving training seminars, presentation of quality awards, preparation of quality awareness newsletters and vendor/customer quality awareness discussions.

By far the most important innovation in the U.S. workforce in the 1980's will be the use of employee involvement groups. Quality circle programs adopted from Japanese productivity efforts are the best known of employee involvement efforts. A quality circle's (QC) major task is to pinpoint and solve a particular work group's quality and productivity problems. QC are small groups of about ten employees, meeting voluntarily on a regular basis on problems within their work area. These employee involvement teams operate autonomously in identifying alternative solutions and implementing the best improvement action. The long-term goal of QC teams is to build acceptance of responsibility for improving quality and productivity.

Companies following an employee involvement approach to quality management are investing training resources to teach techniques for finding and resolving problems in a team atmosphere. Responsibility for detection of defects and the prevention of future problems will rest with the workforce itself. Management will place considerable emphasis upon active participation, judgment and communication.

Primarily through employee involvement and participative style management, many companies are now seeking to build commitment and gain contribution from all their employees. This approach replaces the dictatorial boss/employee relationship with a process that encourages group problem solving, and resistance to change is reduced.

The workplace of the 1980's will be shaped by emerging human resources management innovations such as employeee involvement groups. American industries are entering a period in which the untapped talent and energy of workers will be developed into a competitive force.

II. 1982 AND BEYOND

1982 Economic Performance and The 1983 Outlook (Table 1)

The U. S. economy spent 1982 in recession. In current dollars the Gross National Product grew 4.1% during the year. However, this growth was more than offset by inflation, which averaged 6.1% when

measured by changes in the Consumer Price Index. Real dollar growth was in fact -1.8%, considerably worse than the 1.9% growth achieved in 1981. Similarly, real Disposable Personal Income and real Personal Consumption Expenditures grew only about 1% each during the year. Most industrial production indices decreased and capacity utilization dropped from 78.5% in 1981 to 69.8% in 1982 due to a 21.4% decrease in business inventories during the year as manufacturers cut operating expenses by reducing carrying costs. This decline led to an unemployment rate that peaked at approximately 11%, the highest level since 1940. Even the country's money markets were under great strain throughout the year as the United States saw a record federal budget deficit, watched failures of several financial institutions and had to re-negotiate loan repayment schedules with many financially troubled developing countries.

News for the year was not all bad, though. While full-year 1982 totals were gloomy, the last quarter of 1982 showed the beginning of a recovery which has picked up steam in 1983. This recovery has been led by an exceptionally strong stock market. In August 1982 the Dow Jones Industrial average bottomed out as it dipped below 800, however, by April 1983 it had risen above 1200 for the first time in history.

Also, the prime interest rate which was 15.75% in January 1982 had dropped to 11.50% by year end. This has encouraged individual borrowing in the early months of 1983 with both the housing and automobile markets showing improvement. Unemployment has even begun slowly down as business has started to pick up.

Indications are that this recovery will continue at least through 1983 and probably well into 1984, with an expected real GNP growth for 1983 of approximately 3.6% and unemployment drifting lower, yet still with only a projected 5.5% to 6.0% 1983 inflation rate. Of special interest to the Rigid Paper Box industry, real dollar sales in some major R.P.B. end-use industries are expected to grow even slightly faster than GNP. Confectionary products, stationary and pharmaceutical shipments are all projected to rise between 3.7% and 4.0% above 1982 levels.

The size and strength of the economic recovery is still uncertain. The Federal Reserve control on the money supply, size of the federal budget deficit, prime interest rate level and the effect of the proposed 1983 tax cut will all be factors. The singular widely-held belief is that a sustained recovery is under way.

TABLE 1

HOW VARIOUS ECONOMIC INDICATORS PERFORMED

IN 1982

(Billion Current Dollars Unless Otherwise Stated)

	1982	1981	% Change
Gross National Product (1972 $)	1475.5	1502.6	-1.8
Gross National Product	3057.5	2937.7	4.1
Personal Consumption Expenditures	1972.0	1843.2	7.0
Gross Private Domestic			
Investment	421.9	471.5	-10.5
Nonresidential	347.5	346.1	0.4
Residential	95.8	104.9	-8.7
Government Purchases of Goods and			
Services	647.1	596.9	8.4
National Personal Income	2569.7	2415.8	6.4
Wage and Salary Disbursements	1560.1	1493.9	4.4
Other Labor Income	153.8	140.4	9.5
Proprietor's Income	120.0	124.7	-3.8
Disposable Personal Income	2172.5	2029.1	7.1
Civilian Employment (Millions)	99.6	100.4	-0.8
Unemployment Rate (%)	9.7	7.6	2.1
Total Industrial Production Index			
(1967 - 100)	138.6	151.0	-8.2
Total Mfg. Production Index			
(1967 - 100)	137.6	150.4	-8.5
Capacity Utilization - (%)			
Total Mfg.	69.8	78.5	-8.7
Paper & Allied Products Index			
(1967 - 100)	150.8	155.0	-2.7
Wholesale Price Index for			
Pulp Paper & Allied Products			
(1967 - 100)	288.5	273.8	5.4

III. THE R.P.B. INDUSTRY'S ECONOMIC PERFORMANCE IN 1982 SALES VOLUME (Table 2 and Charts 1 and 2)

The 57th Annual Financial Survey, covering 1981, explained the new procedure for estimating R.P.B. Industry Sales and R.P.B. Production. The Annual Dollar Sales Series was pegged to the 1977 Census of Manufacturers estimate of industry sales ($394,900,000) The NP&PA Statistical Committee decided that a 4% reduction in annual billings should be incorporated in the industry sales statistics, starting in 1982, in order to compensate for absorption of business from companies who have left the industry.

The NP&PA Rigid Box Manufacturers who participated in the Billings Report saw their sales drop 2.39% in 1982 compared to 1981. Factoring in the 4% reduction yielded an overall sales total decline of 6.1% for the R.P.B. Industry. Industry sales for 1982, expressed in current dollars, thus declined for the first time after six consecutive years of increase.

The 1982 R.P.B. Industry Sales of $485,357,000 was equal to 187.4% of the 1967 industry sales. As shown in Table 2, the 1967-1982 average annual growth rate for industry sales is 4.19%.

The data and analysis presented in Table 2 and Charts 1 and 2 reflect country-wide averages. Performance by geographical regions could be substantially different, as indicated by the 1982 sales growth data given below.

Billings: Geographically Segregated

Division (Sector)	Gain Over 12 Months, 1982 vs. 1981
MW (Midwest)	+ 13.7
Southern	- 1.2
East (Metropolitan)	- 3.5
Pacific Coast	- 3.9
MW (Western)	- 8.1
New England	- 8.3
East (Empire)	- 11.5
East (Central)	- 16.1

The only bright spot in the country continued to be the Midwest which showed an average improvement of 13.7% for the year. All other geographic sections reflect an average performance below the full year 1981.

TABLE 2

HISTORICAL SALES AND PRODUCTION SERIES

Year	(1) R-P-B Industry's Annual Sales	(2) Year to-Year % Change	(3) R-P-B Inds. $ Sales Indices (1967 = 100)*	÷	(4) & Allied Products Prod. Prices Indices (1967 = 100)	=	(5) R-P-B Production Indices (1967 = 100)
1967	$258,944,000	+ 2.4	100.0		100.0		100.0
1968	276,552,000	+ 6.8	106.8		101.1		105.6
1969	286,231,000	+ 3.5	110.5		104.0		106.2
1970	284,514,000	- 0.6	109.9		108.2		101.6
1971	269,719,000	- 5.2	104.2		110.1		94.6
1972	286,981,000	+ 6.4	110.8		113.4		97.7
1973	317,975,000	+10.8	122.8		122.1		100.6
1974	351,999,000	+10.7	135.9		151.7		89.6
1975	316,799,000	-10.0	122.3		170.4		71.8
1976	364,635,000	+15.1	140.8		179.4		78.5
1977	394,900,000	+ 8.3	152.5		186.4		81.8
1978	428,467,000	+ 8.5	165.5		195.6		84.6
1979	464,458,000	+ 8.6	179.4		219.0		81.9
1980	484,430,000	+ 4.3	187.1		249.2		75.1
1981	516,887,000	+ 6.7	199.7		273.7		73.0
1982	485,357,000	- 6.1	187.4		288.5		65.0

1967-1982 Average
Annual Growth Rate: 4.19%

1986 Projected Sales**: $571,960,000

*Obtained by dividing each year's sales by $258,944,000, the sales in the base year, 1967.

**Projection assumes that the annual average growth rate of 4.19% is maintained during the years 1983 to 1986.

CHART 1 - R-P-B INDUSTRY'S DOLLAR SALES & SALES INDEXES: SEMI-LOG SCALES

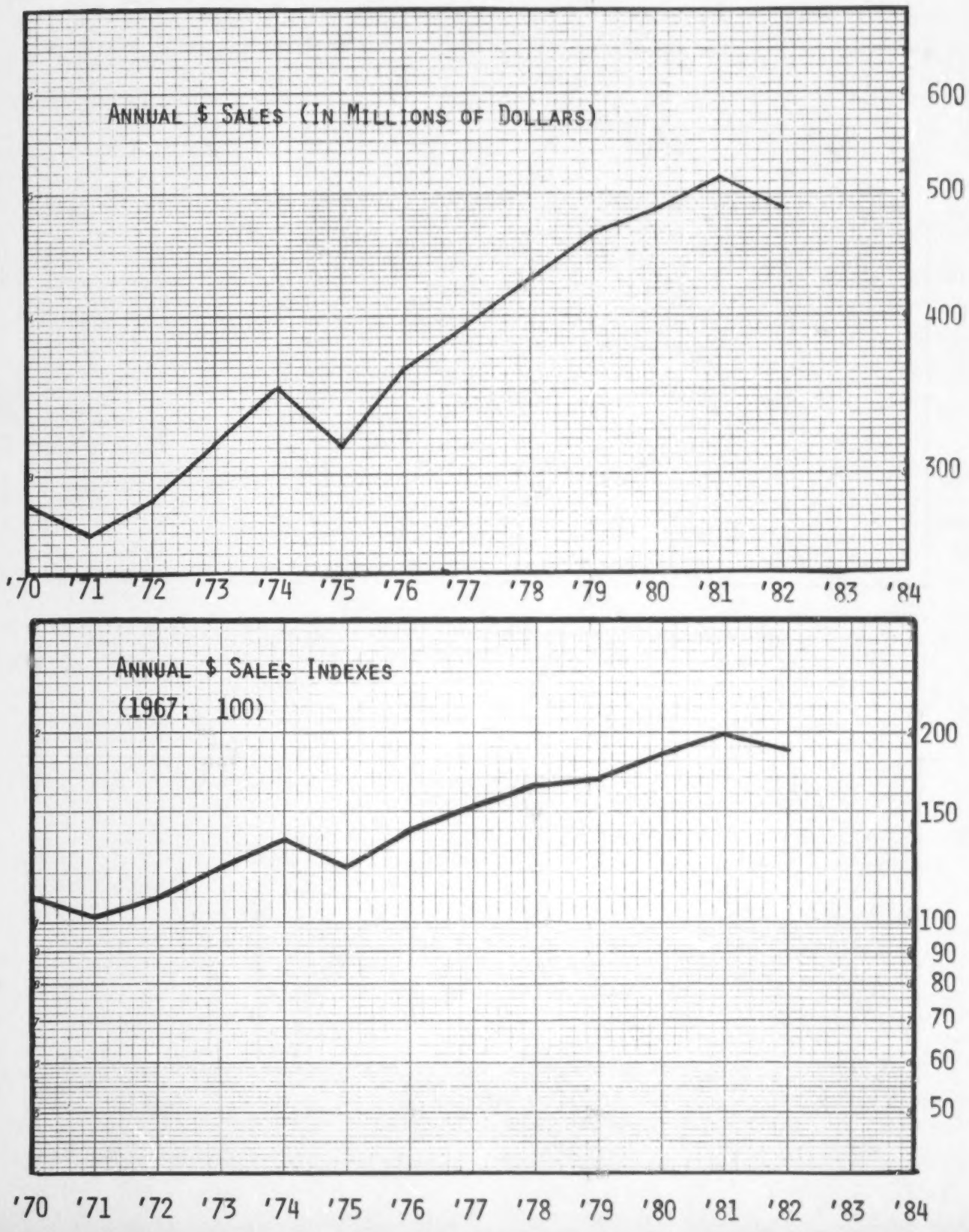
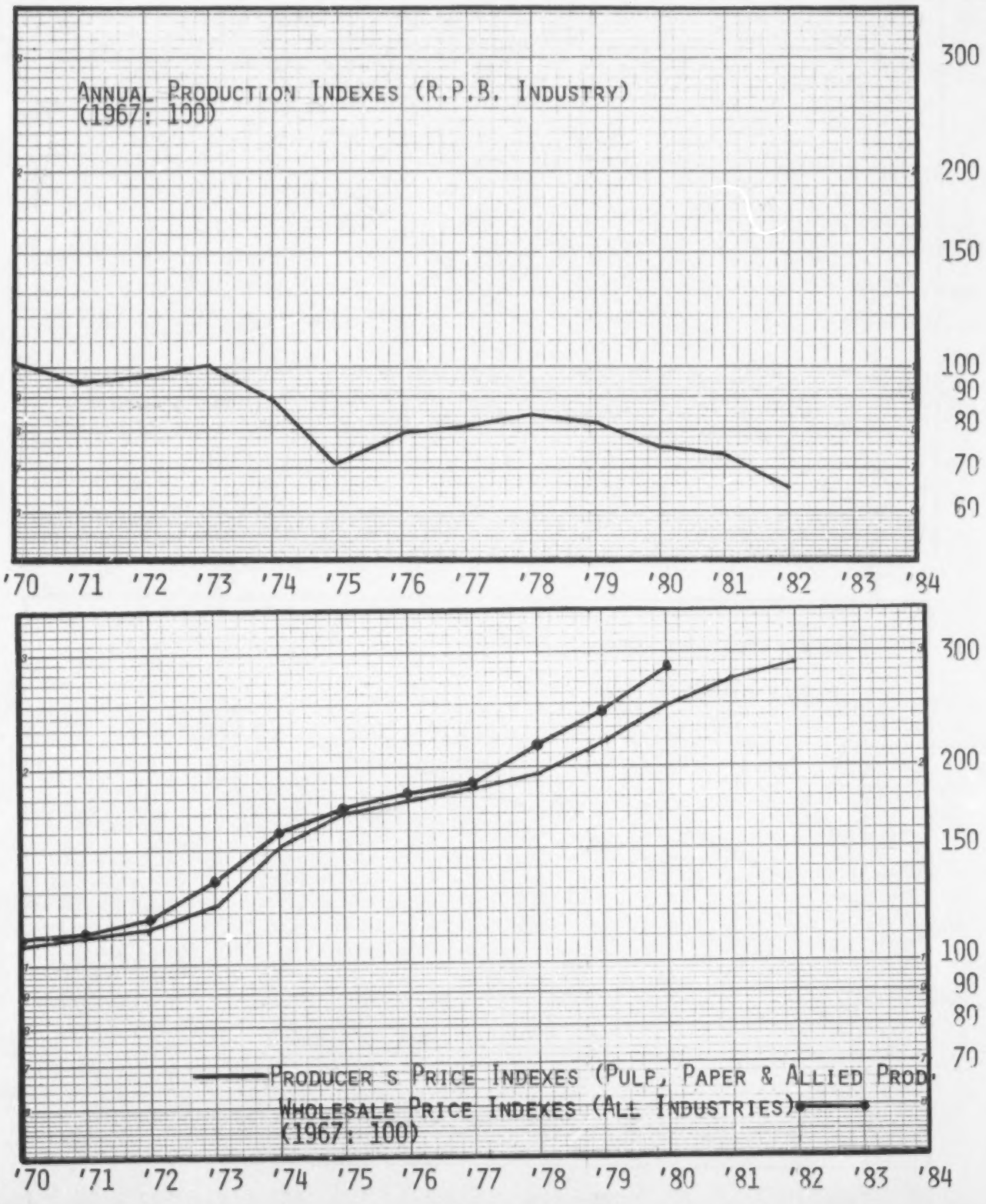


CHART 2 - WHOLESALE PRICE INDEXES & R.P.B. INDUSTRY'S PROD.
INDEXES: SEMI-LOG SCALES



Comparative Production Performance of the R.P.B. Industry and Other Paper Related Industries During 1982/1981

The 1982 R.P.B. Industry Production Index, calculated in Table 2, fell sharply during the year. Down by 8.0 percentage points, the decline was the largest year-to-year change since 1975 when the index fell by 17.8 percentage points.

The production indices of the R.P.B. Industry for the years 1980, 1981 and 1982, derived in Table 2, are presented below along with the indices of other paper products industries. The indices of the other industries were obtained from the Federal Reserve Board's data base; since the R.P.B. Industry is, in fact, a segment of the Paperboard Containers Industry, its indices are not separately reported.

	Production Indices			% Point Changes		
Industry	1982	1981	1980	1982/ 1981	1981/ 1980	1980/ 1979
Rigid Paper Box	65.0	73.0	75.1	-8.0	-2.1	-6.8
Paper and Products	149.6	155.0	151.0	-5.4	+4.0	+0.01
Paperboard	142.4	154.4	150.2	-12.0	+4.2	+2.7
Paperboard Containers	143.9	150.0	148.8	-6.1	+1.2	-3.3
Converted Paper Products	175.4	173.5	168.8	+1.9	+4.7	+2.8

A comparison of the year-to-year percentage point changes reveals that the Paper and Products, Paperboard and Paperboard Containers experience significant drops as did the R.P.B. Industry. This was a sharp contrast to the 1981/1980 period when the R.P.B. Industry was the only industry showing a decline.

IV. PROFILES OF THE R.P.B. INDUSTRY PERFORMANCE

Profit Performance (Tables 3 and 4 and Chart 3)

Industry profit as estimated from the NP&PA survey data, dropped 40.6% from $25,327,000 the year before to $15,046,000 in 1982. This drop was directly attributable to a lower industry profitability and lower sales. Net profit before taxes (NPBT) as a percentage of sales dropped from 4.9% in 1981 to 3.1% in 1982. Sales decreased 6.1% from $516,887,000 in 1981 to $485,357,000 in 1982.

As indicated in Table 3, the lower profitability was due to higher cost of sales and non-manufacturing expenses. Factory payroll and manufacturing expenses rose, increasing the cost of sales by .8% points while non-manufacturing operating expenses declined by .1% points. An increase of 1.1% points in extraordinary expenses (not related to sales of factory produced goods) helped raise total non-manufacturing expenses.

The increase in factory payroll was due to higher direct labor expenses, which rose .8% points from the 1981 level. Improved performance on supervision and indirect labor, however helped keep the payroll increase down to 0.6% points. It is, of course, possible that the higher direct labor expense was due in part to reduced supervision and indirect labor expenses.

The small overall decrease of .1% points in the non-manufacturing operating expense occurred with only minor changes in its components. Delivery expenses rose .1% points while general and administrative expenses rose .2% points. The industry, however, did well to reduce the third component, selling expenses by .4% points. The breakdown for the non-manufacturing operating expenses for 1982 is given in Table 4.

The industry performed better than it did in 1981 on a number of performance measures. Gross overhead per direct labor fell by 1.8% points in 1982. Administrative and general expenses relative to direct labor expenses also fell by .9% points. Net sales to total assets increased by .17. These improvements point to a leaner and potentially more efficient industry. The trends for several key ratios are shown in Chart 3. Note that the 1980-1982 data for the key ratios as calculated for the new sales classifications are displayed on the Chart 3 as "X" points.

However, there were weaknesses in the financial ratios. Total costs and expenses were up as a percent of sales, as was gross overhead as a percent of direct labor and material. Return on assets was also down significantly from 8.2% in 1981 to 5.7% in 1982.

Taken all together this generally poorer profit performance probably accounts for the 13.1% points increase in liabilities as a percent of total assets experienced in 1982 relative to 1981.

Performance by Geographic Divisions (Tables 4 and 6)

The data in Table 4 indicates that the Southern region, with a NPBT as a percentage of sales of 8.6% substantially led all other regions in profitability. This superior performance was due mainly to relatively lower manufacturing expenses and factory payroll as a percent of sales. (See note of caution on Table 4, regarding these data.)

The region with the next highest profitability was the MW + W + PC region. With an NPBT/Sales of 5.5% this region was ahead of both the NE + E + MET + C region and the national average. This achievement was due primarily to lower material cost and factory payroll expenses.

The companies in the NE + E + MET + C region outperformed the rest of the country on some counts (see Table 6). They had the least manufacturing and non-manufacturing overhead per dollar of direct labor, the least general and administrative expenses per direct

TABLE 3

GENERAL SUMMARY OF INDUSTRY-WIDE PERFORMANCE MEASURES

FOR 1982 AND 1981

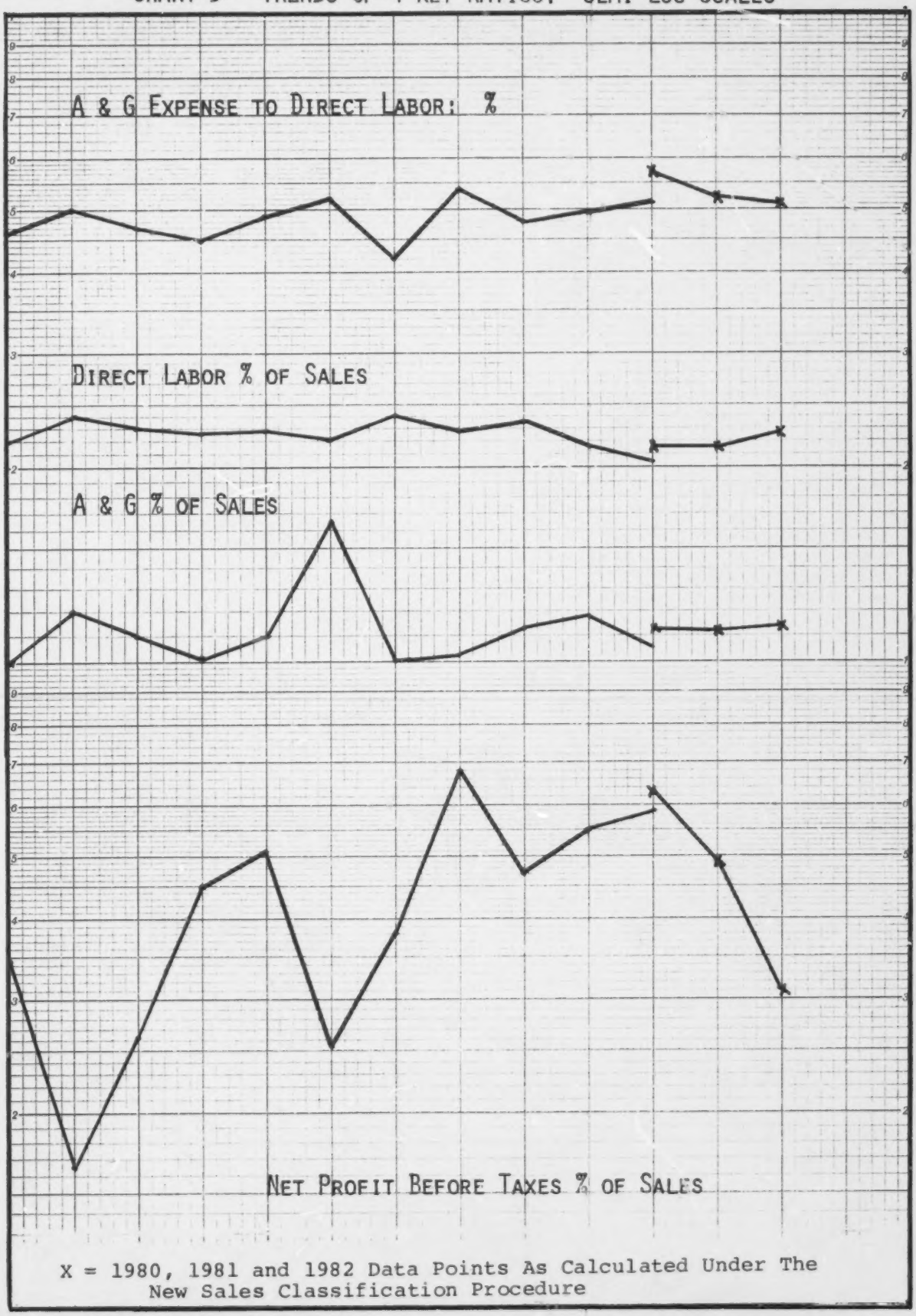
Item	1982	1981	1982/1981 % Change
Industry Sales	$485,357,000	$516,887,000	-6.1%
Sales Index (1967 = 100).....	187.4	199.7	-2.8%
Production Index (1967 = 100..	65.0	73.0	-11.0%
Industry Profits (Before taxes)	$ 15,046,000	$ 25,327,000	-40.6%

Condensed Operating Statement Data as a Percentage of Sales	1982(%)	1981(%)	No of Ratio or % Points 1982 was High (+) Low (-)
1. Net Sales	100.0	100.0	
2. Material Costs	34.4	34.4	0.0
3. Total Factory Payroll	29.2	28.6	+0.6
4. Manufacturing Expenses	12.2	12.0	+0.2
5. Total Cost of Sales	75.8	75.0	+0.8
6. Gross Profit on Sales	24.2	25.0	-0.8
7. Non-Mfg. Operating Expense ..	20.6	20.7	-0.1
8. Other Expense/(Income)	0.5	-0.6	+1.1
9. Total Non-Mfg. Expenses	21.1	20.1	+1.0
10. Net Profit Before Taxes	3.1	4.9	-1.8

Balance Sheet Data	1982(%)	1981(%)	
11. Total Assets	100.0	100.0	
12. Total Liabilities	49.6	36.5	+13.1
13. Total Net Worth	50.4	63.5	-13.1

Financial Ratios	1982(%)	1981(%)	
Total Costs & Exp/Net Sales	96.9	95.1	+1.8
Gross Overhead/Direct Labor	179.2	181.0	-1.8
Gross Overhead/(Direct Labor + Material)	70.6	69.8	+0.8
Admin. & Gen. Exp/Direct Labor .	51.0	51.9	-0.9
Net Sales/Total Assets	1.84	1.67	+ .17
Return on Assets (Before Taxes)	5.7	8.2	-2.5

CHART 3 - TRENDS OF 4 KEY RATIOS: SEMI-LOG SCALES



labor dollar, the highest net worth as a percentage of total assets, and the most net sales as a ratio of total assets. However, a high cost of sales as a percentage of net sales gave this region the lowest profit as a percent of sales and return on assets of any region.

The POA for the NE + E + MET + C region companies was the lowest (3.4%). The ranking on this performance measure followed directly from the rankings on its two component measures, return on sales and asset turnover.

Performance by Company Sales Size (Tables 5, 6, 7, 8, and 9)

Companies in the sales category $0-$825,000 were not nearly as profitable in 1982 (3.9% NPBT/Sales) as in 1981 (7.5%). This was caused mainly by a greatly increased cost of sales as a percent of net sales. This increased cost of sales more than offset reduced non-manufacturing operating expenses.

The small companies performed slightly better than the national averages in terms of net profit before tax as a percent of net sales during 1982. Their cost of sales was .2 percentage points higher while their total non-manufacturing expenses were 1.0% point lower. Consequently, their NPBT/Sales was .8% point better than the national average.

Companies in the sales category $825,000-$2,000,000 also did better than the national average; they earned 6.3% NPBT as a percent of sales. The increment over the national average was achieved by these companies by controlling cost of sales, specifically factory payroll. As in the 0-$825,000 category, 1982 NPBT as a percent of net sales (6.3%) was lower than in 1981 (7.2%).

In 1982 companies in the $2,000,000-$3,500,000 sales category matched their 1981 performance of 7.2% NPBT/Sales, the highest of any sales size. This was more than twice the national average 3.1%. This was accomplished with a cost of sales and total non-manufacturing expenses 2.8% points and 1.3% points respectively below the national average.

The largest companies in the industry, those in the sales category of $3,500,000+, turned in, for the third year in succession, the poorest performance amongst the four sales classifications. During 1982, they averaged a low .7% NPBT/Sales. Their cost of sales was 77.9% points, higher than the national average of 75.8% and their own performance of 77.2% in 1981. Similarly, their total non-manufacturing expense, at 21.4%, was higher than the national average (21.1%) and their 1981 performance (21.1%).

The large companies basically suffered from high total costs. They had the highest material costs, factory payrolls, manufacturing

expenses, selling expenses, and non-manufacturing expenses as a percent of net sales of all groups. The only places efficiencies due to size seemed to help were in general and administration and executive salaries as a percent of sales.

Other comparatiave statistics are listed in Tables 7, 8 and 9. An End-Use Survey of Industry Sales is included as Table 10. Figures for "Rigid Box" new and used machinery purchased during 1982 are shown in Table 11.

TABLE 4

COMPARATIVE PERCENTAGE PERFORMANCE

BY GEOGRAPHICAL DIVISIONS

1982

Condensed Operating Statement Data as a Perentage of Sales	U.S. TOTAL %	NE+E MET+C %	S* %	M+W + PC %	Your Company %
1. Net Sales	100.0	100.0	100.0	100.0	100.0
2. Material Costs	34.4	34.7	39.3	33.2	---
3. Total Factory Payroll ...	29.2	29.8	23.9	26.1	---
4. Manufacturing Expenses ..	12.2	12.5	6.9	11.5	---
5. Total Cost of Sales	75.8	77.0	70.1	70.8	---
6. Gross Profit on Sales ...	24.2	23.0	29.9	29.2	---
7. Non-Mfg. Operating Exp. .	20.6	20.6	21.5	23.7	---
8. Other Expense/Income	0.5	0.6	-0.2	0.0	---
9. Total Non-Mfg. Expense ..	21.1	21.2	21.3	23.7	---
10. Net Profit Before Taxes .	3.1	1.8	8.6	5.5	---
Expense Detail as a Percentage of Sales	%	%	%	%	
Factory Payroll - Item 3					
3a. Direct Labor	22.4	22.5	12.7	20.8	---
3b. Supervision & Indirect .	6.8	7.3	11.2	5.3	---
%Depreciation Incl. in Item 4	15.8	14.1	26.5	11.7	---
Operating Expense - Item 7					
7a. Delivery	3.6	3.4	6.9	4.6	---
7b. Selling	5.6	6.2	1.2	4.7	---
7c. Gen & Administration ..	11.4	11.0	13.4	14.4	---
%Exec. Salary Incl. in Item 7c	---	32.7	46.2	21.0	---

*The results obtained for the Southern Geographical Division should be interpreted cautiously. The results shown are based on the responses to the 1980, 1981 and 1982 Survey. The 1982 data could not be calculated because of an insufficient number of survey respondents in the "S" Division.

TABLE 5

COMPARATIVE PERCENTAGE PERFORMANCE

BY COMMON SIZE

Condensed Operating Statement Data as a Percentage of Sales	1982 SALES DOLLAR VOLUME 0 to 825M*	825M-2000M	2000M-3500M	3500M+	Your Company
	%	%	%	%	%
1. Net Sales	100.0	100.0	100.0	100.0	100.0
2. Material Costs	33.0	34.2	34.0	35.3	---
3. Total Factory Payroll	31.3	24.7	27.4	30.3	---
4. Manufacturing Expenses	11.7	13.0	11.6	12.3	---
5. Total Cost of Sales	76.0	71.9	73.0	77.9	---
6. Gross Profit on Sales	24.0	28.1	27.0	22.1	---
7. Non-Mfg. Operating Exp.	18.0	21.1	21.2	21.7	---
8. Other Expense/Income	2.1	0.7	-1.4	-0.3	---
9. Toal Non-Mfg. Expense	20.1	21.8	19.8	21.4	---
10. Net Profit Before Taxes	3.9	6.3	7.2	0.7	---
Expense Detail as a Percentage of Sales	%	%	%	%	%
Factory Payroll-Item 3					
3a. Direct Labor	24.4	20.3	18.3	22.8	---
3b. Supervision & Indirect	6.9	4.4	9.1	7.5	---
% Depreciation Incl. in Item 4	15.2	9.4	13.5	19.4	---
Operating Expense - Item 7					
7a. Delivery	2.8	3.0	5.2	4.0	---
7b. Selling	2.7	4.4	3.9	8.0	---
7c. Gen & Administration	17.5	13.7	12.1	9.7	---
% Exec. Salary Incl. in Item 7c	50.1	31.1	39.8	17.2	---
Balance Sheet Data	%	%	%	%	%
11. Total Assets	100.0	100.0	100.0	100.0	100.0
12. Total Liabilities	37.1	39.3	39.7	63.2	---
13. Total Net Worth	62.9	60.7	60.3	36.8	---

TABLE 6

COMPARATIVE PERCENTAGE PERFORMANCE BY:

	1982 SALES DOLLAR VOLUME					GEOGRAPHIC			
	U.S. TOTAL	0 to 825M	825M-2000M	2000M 3500M	3500M+	NE+E MET+C	S*	MW+W + PC	Your Company
1. Total Costs & Exp/Net Sales	96.1%	96.1%	93.7%	92.8%	99.3%	91.2%	91.4%	94.5%	___
2. Gross Oh'D./D.L. ...	179.2%	157.9%	193.5%	220.3%	181.1%	182.1%	310.2%	194.1%	___
3. Gross Oh'D./ (D.L. + MTL)	70.6%	67.2%	71.9%	77.3%	71.0%	71.6%	75.8%	74.9%	___
4. Net Worth/ Total Assets	50.4%	62.9%	60.7%	60.3%	36.8%	49.1%	--	40.7%	___
5. (Gen. & Admin.)/ D.L.	51.0%	50.9%	67.6%	65.8%	42.8%	48.8%	105.5%	69.0%	___
6. Net Sales/ Total Assets	1.84%	1.90%	1.68%	1.82%	1.91%	1.80%	1.59%	1.79%	___
7. Return on Assets before Taxes	5.7%	7.4%	10.5%	13.3%	1.2%	3.4%	--	9.9%	___

*Those results shown for the "S" Division represent the average of 1980, 1981 and 1982 performance. The 1982 data could not be calculated because of an insufficient number of survey respondents in this particular category.

Items with a -- mark could not be calculated to be representative figures due to the small number of companies responding to the particular survey question.

TABLE 7

MISCELLANEOUS PERFORMANCE RATIOS

ACCORDING TO COMPANY SIZE

	1982 SALES DOLLAR VOLUME				
	0 to 825M	825M-2000M	200M-3500M	3500M+	Your Company
Inventory Turnover (times)	7.8	4.8	5.3	9.6	---
Labor Turnover (times) ..	1.4	1.6	1.4	1.8	---
Collection Period (days).	37.2	34.8	37.3	46.0	---

TABLE 8

AVERAGE NUMBER OF EMPLOYEES

ACCORDING TO COMPANY SIZE

	1982 SALES DOLLAR VOLUME				
	0 to 825M	825M-2000M	2000M-3500M	3500M+	Your Company
Average Number of Employees					
Direct Labor	14.3	25.2	40.8	159.7	---
Indirect Labor	2.4	3.5	9.4	27.3	---
Sales, Administrative and Other	3.4	5.9	11.8	40.3	---

TABLE 9

COMPANY IMAGE STATISTICS

TITLE	RATIOS	1982 SALES DOLLAR VOLUME				
		0 to 825M	825M-2000M	2000M-3500M	3500M+	Your Company
Direct Productivity	Sales / Direct Labor Employment	$33,403	$44,526	$62,338	$47,842	---
Net Productivity	Sales / Total Employment	$24,254	$32,396	$41,023	$33,602	---
Administrative Load	Gen. & Admin. Expense / Direct Labor Employment	$ 4,159	$ 6,102	$ 7,525	$ 4,662	---
Depreciation Recovery	Depreciation Expense / Sales	1.8%	1.2%	1.6%	2.4%	---
Return on Equity	Net Profit Before Taxes / Net Worth	11.7%	17.3%	22.0%	3.2%	---
Employment Investment	Net Worth / Total Employment	$ 8,046	$11,719	$13,558	$ 6,478	---

TABLE 10

END-USE SURVEY OF INDUSTRY SALES

(Percent)

(Millions)	1974	1975	1976	1977	1978	1979	1980	1981	1982
Textiles Apparel & Hosiery	4.9	7.5	3.7	4.8	7.3	4.5	4.4	5.5	3.3
Dept. Stores & Specialty Shops	10.1	9.9	10.7	10.6	10.1	8.3	6.8	7.1	5.6
Cosmetics & Soaps	3.9	1.8	5.3	5.1	3.3	4.3	5.5	3.9	1.4
Confections	9.8	13.3	10.5	8.1	9.0	15.7	12.6	18.0	16.6
Stationery & Office Supplies	10.4	9.7	12.5	13.2	11.8	15.0	13.5	9.3	17.1
Jewelry & Silverware	8.6	5.2	4.2	14.0	10.7	7.6	9.3	9.7	10.0
Photographic Products & Supplies	3.2	2.2	2.4	2.7	3.0	3.5	4.5	4.3	4.5
Shoes & Leather	7.5	4.8	1.3	1.1	3.7	0.4	0.3	0.2	0.3
Drugs, Chemicals & Pharmaceuticals	7.8	6.9	9.3	7.3	4.9	13.1	7.5	7.8	6.3
Toys & Games	1.1	2.3	3.3	2.6	2.1	1.4	1.4	1.8	2.9
Hardware & Household Supplies	7.7	7.0	6.4	6.2	5.4	3.4	5.5	4.0	7.5
Food & Beverages	1.2	2.9	3.6	0.3	2.9	5.4	4.3	3.9	1.4
Sporting Goods	1.4	1.9	0.7	1.0	1.2	1.7	1.2	1.2	0.4
Other Major Customers (A)									
(a) Electronics	2.3	3.4	4.2	2.6	2.9	4.3	3.6	3.5	3.9
(b) Educational	4.8	3.9	3.9	6.5	5.2	3.8	3.7	4.4	2.7
(c) Other	10.5	12.2	5.6	7.1	10.7	1.1	8.4	7.0	7.8
Misc. Customers	4.8	5.1	12.4	6.8	5.8	6.5	7.5	8.4	8.3
	100%	100%	100%	100%	100%	100%	100%	100%	100%

TABLE 11

RIGID BOX NEW & USED MACHINERY PURCHASED

Sales Size	1982 Total	No of Co.'s*	Avg. per Co.
$0-825M			
New	$ 113	1	$ 113
Used	$ 57,767	4	$14,442
$825M-200M			
New	$ 83,995	5	$16,799
Used	$ 75,500	2	$37,750
$2000M-3500M			
New	$162,130	4	$40,533
Used	$ 60,100	1	$60,100
$3500M+			
New	$ 62,990	2	$31,495
Used	$119,613	2	$59,807

*No. of Co.'s = Number of Companies that reported purchases.